



The Lexical Stage of Expressing Temporality by Bulgarian L2 Instructed Learners

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Abstract

This article focuses on some of the findings of the author's research on the acquisition of English-tense morphology by Bulgarian L2 instructed learners, who have never been exposed to English in naturalistic conditions (English used by native speakers in an English-speaking country). The study has been conducted in the framework of Aspect Hypothesis (Andersen & Shirai, 1994) which makes a distinction between the grammatical aspect, marked by linguistic devices, such as verb morphology and auxiliaries, and the lexical aspect, which refers to the inherent temporal characteristics of verbs and to the temporal conditions of the situation that the verb designates (Sugaya and Shirai, 2007) and is based on Vendler's (1967) classification of verb-predicates according to their inherent semantic features: statives, activities, accomplishments and achievements.

The empirical data, collected through written narratives elicited by an excerpt of a silent film, showed some unexpected results with the group of learners with lower proficiency in EFL and these are the particular results which the article focuses on. They show support for the findings of a previous study on temporality expression in SLA, based on the meaning-oriented approach, used in a project sponsored by the European Science Foundation and guided by Clive Perdue and Wolfgang Klein (1992), namely – that the expression of temporality exhibits a sequence which corresponds to stages of acquisition which are characterized by the use of pragmatic, lexical, and morphological means, which in their turn correspond to the general levels of interlanguage development labelled the pre-basic variety, the basic variety, and “beyond the basic variety” (Dietrich et al., 1995).

Keywords: *tense - aspect morphology, expressing temporality, meaning-oriented approach, lexical stage, SLA.*

Introduction

Expressing tense and aspect through morphological markers is an important issue in the development of a second language competence as it indicates learners' syntactic and semantic competence. Although extensively researched, so far, the acquisition of English tense-aspect morphology has been mostly tested on L2 learners in an English-speaking environment (Bardovi-Harlig, 1992a, 1992b, 1992c, 1998; Bardovi-Harlig and Bergström, 1996; Bayley, 1994); more rarely as a foreign language (Robison, 1990, 1995; Ayoun & Salaberry, 2008) and almost never on Bulgarian L2 learners in foreign language settings.

The only instance of research on certain features of English tense and aspect, acquired by Bulgarian instructed L2 learners, has been done by Slabakova (2003) who investigated how semantic properties of functional categories (certain tenses and aspectual properties) are acquired by Bulgarian L2 instructed learners. She looked into the issue from the perspective of UG availability in SLA, supporting the idea of a full access representation and looking for evidence within the Minimalist Paradigm framework (Chomsky, 1995, 1998). The functional category of tense / aspect was also treated as a parameter, set slightly differently in Bulgarian, compared to English.

The Aspect Hypothesis, developed by Andersen and Shirai (1994, 1996), Shirai and Andersen (1991), Bardovi-Harlig (1992a; 2000); Robison (1995) is one of the most well-researched theoretical frameworks used to investigate the L2 development of tense-aspect morphology, which has generated a large body of empirical data on the L2 acquisition of tense / aspect morphology. The research questions of the current study have also been investigated within the framework of the Aspect Hypothesis and the Meaning-oriented Approach to second language acquisition (Von Stutterheim & Klein, 1987; Giacalone Ramat, 2002; Skiba & Dittmar, 1992; Berretta, 1995).

One of the main claims of AH is that in the early stages of acquisition, verbal morphology does not encode tense or grammatical aspect, but it encodes inherent semantic aspectual distinctions (Andersen, 1984; 1991; Andersen & Shirai, 1994; Robison, 1990). In other words, the AH makes a distinction between the grammatical aspect, normally marked by linguistic devices, such as verb morphology and auxiliaries, and the lexical aspect, which refers to the inherent temporal characteristics of verbs and to the temporal conditions of the situation that the verb designates (Sugaya and Shirai, 2007). As a result, the initial stages of tense and aspect marking are highly dependent on, or constrained by, the inherent semantic features of verbs: states, activities, accomplishments and achievements (Vendler, 1967).

Functional / Pragmatic perspectives on second language acquisition in expressing temporality

The functional or pragmatic approach to second language acquisition was adopted by a number of researchers in the late 1970s and early 1980s, and they were mainly concerned with the ways in which second language learners cope with expressing meaning and achieving their communicative goals. In this respect, they paid attention to the speech acts L2 learners seek to perform and the ways in which they exploit the available social, physical and discourse context to help them express meaning. Instead of making the formal linguistic

system their starting point, these linguists looked upon semantic and pragmatic constructs as integral to grammatical structure (Givon, 1979, 1985; Halliday, 1985; Van Valin, 1992). A major project on the second language acquisition of adult migrants, funded by the European Science Foundation (1982 – 1988), brought the functionalist perspective in SLA research on a much larger scale. It continued for six years and involved research teams in five European countries and five target languages – English, German, Dutch, French and Swedish.

The project aimed to investigate and give an account of naturalistic interlanguage development among adult L2 learners and to identify internal and external factors affecting the acquisition process. Perdue (1993) argued for a functional approach in developing a second language acquisition theory, independent of theoretical linguistics. They claimed that only a broad pragmatic approach can account for the means used by L2 learners to express notions such as temporality. They specifically focused on the linguistic means for encoding time reference (verb morphology to do with tense and aspect).

One of the tasks the ESF project used for collecting data was re-telling the story of a silent Charlie Chaplin film. Drawing on these narratives and through a functional analysis, Klein and Perdue (1992) claim to have identified three developmental levels in the basic organization of learners' utterances across all the linguistic groups that were studied: Nominal utterance organization (NUO); Infinite utterance organization (IUO); and Finite utterance organization (FUO).

As Klein and Perdue (1992, p. 302) characterize them, the NUO, which could also be called "preverbal utterance organization" are very simple, constructed of seemingly unconnected nouns, adverbs and particles. Verbs are missing; hence there are no argument structures or case role assignments. No distinction is present between finite and non-finite components of the verb. Such a distinction is only made at FUO level and it is not attained by all the learners. Transition from NUO to IUO and then to FUO is a very slow and gradual process and the coexistence of several types of utterance is not uncommon.

The European Science Foundation team also argued that there is a range of competing constraints, such as pragmatic, semantic, and phrasal, which affect learners' utterances. Certain functionalist researchers (Dietrich et al., 1995), focused specifically on the means learners use to express temporality. Bardovi-Harlig (2000) summarizes the stages through which interlanguage users of any language pass, when expressing temporality: 1) Pragmatic stage – at which, in order to express temporality, learners rely on scaffolding by

interlocutors; inference from the context; contrasting events; and chronological order; 2) Lexical stage, at which temporal and locative adverbials (e.g. now, then, here, there); connectives (e.g. and; and then); and verb lexis (e.g. start, finish) are relied upon to express temporality; and 3) Morphological stage, at which learners start to use verb morphology (tense and aspect) as indicators of temporality.

Studies of six different target languages agreed as to the linguistic devices employed in the expression of temporality and the order in which they appear. The expression of temporality exhibits a sequence from pragmatic to lexical and then to grammatical devices (Dietrich et al., 1995; Meisel, 1987). This sequence corresponds to the use of (a) discourse principles such as chronological order and scaffolding; (b) lexical means such as adverbials and connectives; and (c) verbal morphology. The stages of acquisition which are characterized by the use of pragmatic, lexical, and morphological means correspond to the general levels of interlanguage development labelled the pre-basic variety, the basic variety, and “beyond the basic variety” (Dietrich et al., 1995). Ramat and Banfi (1990) suggest that the acquisitional sequence is probably universal and independent of the languages involved.

Pragmatic means for expressing temporality

It has been claimed that in the earliest stage of temporal expression, there is no systematic use of tense-aspect morphology. Therefore, learners establish temporal reference in four different ways: by relying on the contribution of their fellow-speakers (scaffolded discourse); through reference inferred from the context (implicit reference); by contrasting events; and by following chronological order in narration (Meisel, 1987; Schumann, 1987).

The discourse ordering of events in chronological order in which the order of mention parallels the order of occurrence has been widely recognized as a characteristic of learner narratives. It has been given different names in the studies of first and second language acquisition: the order of mention contract (Clark, 1971), the principle of natural order (Klein, 1986), serialization (Schumann, 1987), and the principle of chronological order (von Stutterheim & Klein, 1987; Bardovi-Harlig, 2000).

Learners normally use more than one of the pragmatic means at a time. For instance, they might make use of scaffolding, chronological order and implicit reference at the same time. The use of implicit reference challenges learners to draw on world knowledge, situational knowledge, and contextual knowledge (von Stutterheim & Klein, 1987). A second type of implicit reference, inherent temporal reference, is dependent on the aspectual category of

the predicates (i.e. whether they are expressed by verb phrases or noun phrases). Von Stutterheim and Klein illustrated this with pairs of sentences of a Turkish learner of German, in both of which there is no explicit temporal reference but they are interpreted differently because of the semantics of the predicates:

“ a.) *Türkei Urlaub, meine Mann krank.*

Turkey vacation, my husband ill.

“When he was on vacation, my husband was ill”

b.) *Türkei Urlaub zurückkomm, meine Mann krank.*

Turkey vacation, comeback my husband ill”

“After he came back from vacation in Turkey, my husband was ill” (Von Stutterheim & Klein, 1987, p. 201).

Sentence a.) can be interpreted as “When he was on vacation in Turkey, my husband was ill” because *Türkei Urlaub* is interpreted as a state, ‘be on vacation in Turkey’. In contrast, the first clause in sentence b.) establishes a temporal boundary with *zurückkomm* ‘come back’ and thus the clauses are interpreted as being sequenced: “After he came back from vacation in Turkey, my husband was ill” (Von Stutterheim & Klein, 1987, p. 201 in Bardovi-Harlig, 2000, p. 33).

Lexical means for expressing temporality.

As chronological order is a distinguishing characteristic of all narratives (Dahl, 1984; Schiffrin, 1981, Bardovi-Harlig, 2000), it is not restricted to learners’ interlanguage. As Schumann (1987) noticed, “in standard language, verb morphology interacts with, supports, and often duplicates the work done by pragmatic devices in expressing temporality” (p.38). Thus, the distinction between interlanguage and native language narratives is not in the use of chronological order, but rather in the recourse to other means of signalling temporal reference, which emerge later (Bardovi-Harlig, 2000). These other means are lexical means for expressing temporality, which include temporal and locative adverbials (e.g. in the evening; now; then; here; there, etc.); connectives (e.g. and; and then; while; whereas, etc.); calendaric references (e.g. January, 15), nouns (e.g. Monday) and verbs (e.g. start; finish).

This has been noticed and discussed by Meisel (1987); Thompson and Longacre (1985); Dittmar (1981); Van Holk (1990), Dietrich et al. (1995). It has been observed that at the lexical stage verbs occur in morphologically unmarked forms, also referred to as ‘base’ or ‘default’ forms. It could be a standard generalized form (the base form in English; the third

person singular present in Spanish and Italian) or even an interlanguage form that does not exist in the target language (Meisel, 1980, 1987; Bardovi-Harlig, 1995a; Bardovi-Harlig & Reynolds, 1995; Andersen, 1991; Bergstrom, 1995; Ramat & Banfi, 1990).

At the early lexical stage, the difference between learners' narratives and native speakers' ones is the lack of verbal morphology to support the learners' narrative. Instead, they mainly rely on connectives ('and', 'and then' being the most common) and temporal adverbials such as adverbs of position (now, then, yesterday, at 3pm); adverbs of duration (for weeks; all day); adverbs of frequency (often, always, once); and adverbs of contrast (already, yet) (Klein, 1993, 1994a). There is a general agreement about the importance of lexical means of temporal expression. One of the reasons for this importance might be the difficulty learners experience in comprehending verbal morphology (Brindley, 1987; J. Lee, 1998, 1999). Some processing studies have brought evidence that lexical cues in the input are more important to learners than morphological cues. Such studies have suggested that learners process for meaning before form; they process content words first; and they prefer to process lexical items over grammatical items for semantic information (Van Patten, 1996). Input processing studies revealed that learners of French, Spanish and Italian as a foreign language scored higher in recognizing temporal reference on a recall test when the stimulus sentence contained a temporal adverb in addition to verbal morphology (Musumeci, 1989). Learners of Spanish as a foreign language favoured the time reference indicated by temporal adverbs in sentences where adverbs and tense deliberately conflicted (Sanz & Fernandez, 1992). Even studies of processing, using reaction time, yielded the same results (Boatwright, 1999). In a study on comprehension and processing of the Spanish past tense, J. Lee (1999) noticed that learners often use the adverbials, and not the verb forms, to construct the past reference.

All these findings show that lower-level learners rely more on adverbials than on verb morphology, compared to advanced learners, and some uninstructed learners may never go beyond this stage (Dietrich et al., 1995). However, in order to become proficient in a foreign language, learners do need the additional temporal reference provided by verbal morphology.

Morphological means for expressing temporality

Verbal morphology appears as the next stage, following the adverbial-only stage. Initially, verbal morphology is not used systematically (Meisel, 1987; Schumann, 1987) and learners continue to rely on temporal adverbials. However, as the use of tense morphology increases,

the functional use of adverbials decreases (Bardovi-Harlig, 1992c; Meisel, 1987) and the ratio of temporal adverbials to finite verbs may also decrease (Bardovi-Harlig, 1992c). On the other hand, the use of tense morphology and adverbials does not replace the principle of chronological order.

Other temporal relations in the past also start emerging. Learners start to make references to anterior events (past events that occurred earlier than other past events), thus reporting events out of chronological order (Bardovi-Harlig, 1994b). These deviations from chronological order lead to learners' cycle of dependency on adverbials again (Klein, 1986). In the earliest examples of deviations from chronological order, or 'reverse order reports' (Bardovi-Harlig, 1994b) in interlanguage, adverbs tend to be the most common marker of anteriority. Learners have also been reported to have taken advantage of the simultaneous development of their interlanguage syntax and expressing the anterior events in subordinate clauses, especially those expressing a reason (Klein & Perdue, 1992; von Stutterheim, 1991). Bardovi-Harlig (2000) sees that as a possibility for the cycle of lexical to morphological marking to occur throughout the tense-aspect system whenever new forms and meanings enter the system (p.47). Both base forms and inflected forms may occur in the same interlanguage sample from learners who have started using verbal morphology productively, to mark past events. Lexical devices co-exist and interact with tense-aspect morphology. In other words, the use of adverbials is not restricted only to the pre-morphological lexical stage. They continue to be used well into the next, morphological stage although their frequency of occurrence decreases compared to the number of inflected verbs.

Methodology

The current study of L2 tense-aspect acquisition by Bulgarian instructed English learners has tried to make use of methodological procedures which proved to be successful in previous tense-aspect studies, and to shed light on the acquisition of lexical aspect and the extent to which it complies with the AH in the narratives of Bulgarian L2 learners of English.

Research objectives of the study

This cross-sectional research has attempted to test whether the claims of the Aspect Hypothesis hold true in Bulgarian by collecting empirical data (written narratives) and investigating the use of English aspect-tense morphology among Bulgarian L2 learners of different level of proficiency in English, who have only had access to classroom instruction and have hardly ever been exposed to native use of tense and aspect. The study addresses

the three claims of the AH that refer to English: the spread of the perfective past, the distribution of the progressive, and the use of the progressive with states.

Apart from investigating the acquisition of lexical aspect as predicted by the AH, the current research also aimed to investigate the acquisition of English grammatical aspect by Bulgarian L2 learners, which is best demonstrated in the use of grammatical tenses. However, this article will only focus on one of the investigated research questions.

Research question

RQ1: *Does the production of past tense-aspect morphology by Bulgarian L2 instructed English learners follow the pattern claimed by the Aspect Hypothesis? Are there any deviations from the pattern in the production of learners with lower level of proficiency in EFL?*

The predictions of AH include the perfective past form being first used in association with telic events (achievements and accomplishments) and later spreading to atelic events and states, in that sequential order. As for the imperfective forms, they will first be used to mark states exclusively and later will gradually be spreading towards the other end of lexical aspectual continuum (activities, accomplishments and achievements, in this order). It is also expected that the imperfective form will appear after the perfective form has already entered the system of inflectional morphology of L2 learner. In addition, AH postulates that in English the progressive will not be used with states.

Research design.

The study sought to address the research question through investigating the empirical data, collected through written narratives, based on a retell-task of an 8-minute excerpt of the silent film *Modern Times*, produced by Bulgarian adult instructed learners of English as a foreign language (EFL). It is cross-sectional in design and tries to investigate the distribution and accuracy in the use of past morphology across different levels of proficiency of learners, employing comparison between the target language and the developing interlanguage.

Although many acquisitional sequence studies are predominantly longitudinal in design, as this allows observing the order in which verbal morphemes emerge and are used, the majority of the aspect hypothesis studies are cross-sectional. The cross-sectional design tends to amplify certain analytical issues which become more salient in the process of analysis. It also focuses on an 'end-state' perspective of acquisition, although this is not an intrinsic feature of the design itself. By using a cross-sectional design, it is possible to score form and meaning separately, thus capturing learners' use of target morphology as they

progress (Bardovi-Harlig, 1992a, 2000; Bergstrom, 1995). Another distinct advantage of the cross-sectional design is the possibility to include larger samples, provide information on how tense-aspect morphology spreads through interlanguage, and quantify the results.

A noted difficulty with a cross-sectional design is the lack of availability of true beginners in both foreign and second language settings. Also, differences among learners might be exacerbated when researchers calculate group scores (Bardovi-Harlig, 2000). Cross-sectional design is often criticized for not being able to demonstrate the relation between cause and effect of the observed phenomena, and in the case of SLA – the individual paths of acquisition, as they are neglected for the sake of the generalized sample results. Most second language acquisition researchers have identified these methodological concerns (Ellis, 1994; Larsen-Freeman & Long, 1991) which do not refer only to the acquisition of tense- aspect morphology.

Cross-sectional studies, however, just like the longitudinal ones, have the potential of demonstrating that the acquisition of tense-aspect morphology is part of a system for expressing temporality, and it is a slow and gradual process. This can be captured by including an appropriate range of proficiency levels in a cross-sectional research and by the design of elicitation instruments and procedures.

Elicitation procedures

Studies that test the Aspect Hypothesis have demonstrated a range of elicitation methods and analyses. Elicitation tasks used in most of the previous studies on the aspect hypothesis have included oral and written personal and impersonal narratives; written cloze passages (Bardovi-Harlig & Reynolds, 1995; Bergstrom, 1995; Collins, 1997, 1999b), and judgement tasks (Collins, 1999; Salaberry, 1998; Shirai & Kurono, 1998). Retell tasks have also been used to great advantage, having employed elicited narratives through retelling of silent films (Chafe, 1980; the European Science Foundation research, Bhardwaj et al., 1988; Dietrich et al., 1995), performed stories (Bardovi-Harlig, 1992b), and picture stories (Bamberg, 1987; Bamberg & Marchman, 1990).

Materials

Data for the current study have been collected through written narratives of 49 participants, elicited by means of a film-retell task. A short excerpt of the silent film *Modern Times* has been used as it has proved efficient by previous research (Bardovi-Harlig, 1998) and it

contains a series of discrete, easily identifiable action sequences as well as simultaneous actions and changes of scene, ideal for examining the encoding of the aspectual morphology of such events. The advantage of this retell task is that the sequence of events is known to the researcher independently of the narrative itself, so narratives can be compared across learners. It is also suitable for examining the encoding of serial events and foreground as well as simultaneous actions and changes of scenes for examining backgrounding.

Data collection procedure

Participants were given a brief introduction to the film, then watched the excerpt twice and were asked to re-tell the excerpt in their own words, in a written narrative form.

Comprehension-check questions were encouraged and answered, to facilitate the understanding of the events watched. Participants were given 40 minutes to produce their written narratives.

In addition, participants were asked to complete a Background Questionnaire, meant to collect data about their nationality, age, languages learned and spoken, how long they have been learning English and how; whether they have been / lived in an English-speaking country; and to self- determine their level of proficiency of English.

Participants and sampling

Thirty-seven participants in this cross-sectional study were randomly selected students in their first and second year of study at the South West University, Bulgaria. All of them stated to have received classroom instruction in EFL for several years. The research targeted learners with different levels of proficiency in English: elementary, intermediate and advanced. Apart from being self-certified in the Background Questionnaire, their level of proficiency in EFL was also tested by an adapted version of Cambridge Test of Proficiency of English, and subjects were initially grouped into two general groups according to their overall scores on the test – learners with ‘higher’ and ‘lower’ proficiency. The levels of proficiency, self-certified by the participants, did not necessarily coincide with their results on the test. These general groups have been divided into seven sub-groups later in the study, designated as: false-beginners, elementary, pre-intermediate, lower-intermediate, intermediate, upper-intermediate, and advanced, according to their accurate use of past morphology in a grammatical task, which was part of the Test of Proficiency and required the usage of particular past tenses in obligatory context. This subdivision was necessary as the range of the rate of accuracy within the same broad proficiency group varied considerably.

The fact that the main group of participants come from the same first language background (Bulgarian) was a deliberate choice, and it was expected to facilitate the investigation of potential L1 influence, especially with reference to the data, produced by learners with lower level of proficiency in English.

A group of 12 native English speakers, British university students in London, was used as a control group, to ensure that potential asymmetries found are not due to materials or procedure faults.

Written narratives were collected from 49 learners and samples were selected and grouped based on two criteria: a) usable language samples; and b) rate of appropriate use of past tenses on a grammatical task from the Proficiency test. The first criterion excluded all non-narrative texts, similar to a film review, in which present tenses were consistently used instead of past ones.

The second criterion divided learners, initially grouped into two general levels of proficiency in EFL, into seven sub-groups, apart from the control group, based on their overall rate of past tense used, in divisions of 10%, 10-19%, 20% -29%, and so on. The sub-division was done for convenience of the analysis of the past morphology distribution, which has inevitably limited the research in terms of its power for generalization of the results. The segmentation of each initial proficiency level into further sub-groups, was meant to facilitate tracking the distribution of the past morphology markers within each group into more detail. It was also done, since learners showed a considerable range of appropriate use of past tenses, which would make the analysis of past morphology distribution in terms of learners' overall proficiency in EFL less meaningful and interpretable.

Each narrative was also coded for use of a past-tense form in past-time contexts, which included simple past, past progressive and past perfect (pluperfect). The rate of accurate past morphology used in the narratives, has been calculated for verb types rather than tokens. Each verb form counted only once per sample and when multiple forms of the same verb occurred, such as *go*, *went*, and *have gone*, each form was counted as a simple type, to avoid inflating the rate of appropriate use by multiple occurrences of common verbs like *was* and *went*. This type of analysis provides a conservative view of the acquisition of tense-aspect morphology (Bardovi-Harlig, 1992c, 1994), but it was chosen because it allows learners to be compared, based on their appropriate use of past morphology, and not only on the basis of a proficiency test. What is more, describing interlanguage in terms of the rate

of appropriate use of verbal morphology allows comparison of learners across studies (Andersen, 1978; Robison, 1990, Bardovi-Harlig, 2000).

Data analysis procedures

First, the narratives have been analyzed for verbs in a past-time context as ‘past’ or ‘non-past’ and compared to the total number of verbs (tokens). Next, each verb predicate has been assigned to one of the four aspectual classes according to Vendler’s (1957/1967), Dowty’s (1979) and Shirai’s (1995) ¹ tests for aspectual categories. Shirai and Andersen’s diagnostic test for English (1995, p.749) ² has been applied to each verb predicate, to confirm the aspectual class to which it belongs.

All verbs were also coded for verbal morphology: simple past, past progressive, past perfect (pluperfect), infinitive, present tenses and ‘others’. The last category includes different verb predicates for the different proficiency level groups. It mostly consists of base verb forms, not marking any grammatical tense in the lower proficiency groups’ narratives, whereas in the writing samples of learners with higher levels of proficiency ‘others’ might include passive verb forms or a combination of two verb predicates, such as: verb + -ing form of a verb or a modal verb+ a main verb, which have not been considered significant for the aspectual morphology analysis and therefore, have not been coded separately. Uninterpretable morphological forms, such as *stoles* were coded as ‘uninterpretable’. Misspelled verbs, such as *cot* or *caut* instead of *caught* or irregular verbs spelled as regular, such as *goed* instead of *went* were counted as past, as long as they did not result in another existing verb. Following

¹ Most researchers of the tense-aspect morphology have adopted Andersen’s (1991) description of the well-known Vendler-Mourelatos hierarchy (Vendler, 1957; 1967; Mourelatos, 1978) to establish the following inherent semantic (lexical) aspect categories:

states which refer to situations that do not involve change over time, do not have salient endpoints or gaps (have no dynamics), are nonvolitional, and do not require any input of energy (Binnick, 1991; Comrie, 1985; Shirai and Andersen, 1995). E.g. *know, love, hate, want*, etc.

activities – dynamic situations which have duration and involve change over time but lack a specific endpoint (i.e. have an arbitrary endpoint). E.g. *run, sing, play, dance*, etc.

accomplishments – dynamic situations which have some duration, a clear inherent endpoint, and involve an end result. E.g. *fix the car; run a mile; make a cake*, etc.

achievements – dynamic situations that involve an instantaneous change (which takes place instantaneously) and are reducible to a single point in time. E.g. *recognize, die, reach the summit*, etc. Each of these four categories of inherent semantic (lexical) aspect can be characterized in terms of the semantic features: telic, punctual and dynamic. **Telicity** denotes that the verb has an inherent end-point or outcome, **punctuality** denotes lack of duration, and **dynamics** denote the necessity of energy for a situation to exist or continue (Shirai and Andersen, 1995).

² Shirai and Andersen (1995, p.749) promoted a clear three-step procedure for coding verb tokens into Vendler’s lexical aspect categories: [Step 1]: state or non-state; [Step 2] related to non-states only: activity or non-activity; [Step 3] related to non-activity only: accomplishment or achievement. (For further details, please, see Shirai and Andersen, 1995).

the procedures described above, 875 predicates were coded in the written sample, excluding the tokens of the copular verbs *be*, *seem*, *appear*, *become*, vernacular *get*. As tensing of the copula is not representative of the tense-aspect marking of statives, they have been excluded from the analysis (see Bardovi-Harlig & Bergström, 1996).

Analysis and discussion of the findings

The predictions of AH claim that the perfective past forms are first used in association with telic events (achievements and accomplishments) and later spreading to atelic events and states, in that sequential order. The imperfective forms, on the other hand, are claimed to be used first to mark states exclusively and later to gradually spread towards the other end of lexical aspectual continuum (activities, accomplishments and achievements, in this order). It is also claimed that the imperfective forms appear after the perfective forms have already entered the system of inflectional morphology of L2 learners. The AH also postulates that in English the progressive will not be used with states.

Descriptive statistics and mean scores have been calculated for each of the four aspectual classes and for each of the verb tenses used by learners with lower proficiency in EFL, higher proficiency, and Native speakers. Table 1 below demonstrates the results. The table shows L2 learners' results as initially divided into two groups only: learners with higher level of proficiency in EFL and such with lower level of proficiency.

Comparing the means of each aspectual class used by native speakers and the lower level learners, the ratio for accomplishments is 5:1; for achievements – 4.5:1; for activities – 4:1; and for statives – almost 3:1. This shows that L2 learners with lower proficiency in EFL have used almost five times fewer verbs, marked for the aspectual classes of achievement and accomplishment, which are claimed by the AH to be the first to enter the system of L2 learners' interlanguage. This could be interpreted as a serious deviation from the AH claims.

Table 1. *Descriptive statistics of the results*

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower	Upper		
						Bound	Bound		
Accomplishments	Lower	17	2.24	1.715	.416	1.35	3.12	0	5
	Higher	17	7.06	1.952	.473	6.06	8.06	4	11
	Native sp	12	10.58	1.311	.379	9.75	11.42	9	13
	Total	46	6.20	3.763	.555	5.08	7.31	0	13
Achievements	Lower	17	2.00	1.581	.383	1.19	2.81	0	5
	Higher	17	6.00	1.904	.462	5.02	6.98	3	9
	Native sp	12	9.17	.835	.241	8.64	9.70	8	10
	Total	46	5.35	3.261	.481	4.38	6.32	0	10
Activities	Lower	17	1.12	1.269	.308	.47	1.77	0	4
	Higher	17	2.76	1.751	.425	1.86	3.67	0	5
	Native sp	12	4.42	.996	.288	3.78	5.05	3	6
	Total	46	2.59	1.904	.281	2.02	3.15	0	6
States	Lower	17	.65	.862	.209	.20	1.09	0	2
	Higher	17	1.59	1.121	.272	1.01	2.16	0	3
	Native sp	12	3.83	.937	.271	3.24	4.43	3	6
	Total	46	1.83	1.596	.235	1.35	2.30	0	6
Past Progressive	Lower	17	.65	1.057	.256	.10	1.19	0	3
	Higher	17	2.29	1.896	.460	1.32	3.27	0	5
	Native sp	12	2.67	1.303	.376	1.84	3.49	1	5
	Total	46	1.78	1.699	.250	1.28	2.29	0	5
Past perfect	Lower	17	.00	.000	.000	.00	.00	0	0
	Higher	17	.41	.507	.123	.15	.67	0	1
	Native sp	19	2.58	1.240	.358	1.80	3.37	1	5
	Total	46	.83	1.270	.187	.45	1.20	0	5
Infinitive	Lower	17	2.53	2.401	.582	1.29	3.76	0	10
	Higher	17	.06	.243	.059	-.07	.18	0	1
	Native sp	12	1.08	.793	.229	.58	1.59	0	2
	Total	46	1.24	1.840	.271	.69	1.79	0	10

Passive voice	Lower	17	.00	.000	.000	.00	.00	0	0
forms	Higher	17	.71	.772	.187	.31	1.10	0	2
	Native sp	12	1.75	1.658	.479	.70	2.80	0	4
	Total	46	.72	1.167	.172	.37	1.06	0	4
Other Present	Lower	17	5.35	3.757	.911	3.42	7.28	1	14
tenses	Higher	17	.29	.772	.187	-.10	.69	0	3
	Native sp	12	.17	.577	.167	-.20	.53	0	2
	Total	46	2.13	3.397	.501	1.12	3.14	0	14

On the other hand, their usage of complex verb forms, such as Past Perfect or Passive Voice is almost nil. Instead, they have used “Other present tenses”, which include verb forms not inflected for any tense, five times more than the control group.

Whereas the narratives of native speakers show the highest mean of accomplishments and achievements used – 10.58 and 9.17, respectively, learners with lower level of proficiency in EFL show the highest mean in the use of ‘Other present tenses’, in other words, most of the verb predicates they used are not marked for past tense at all. EFL learners with higher level of proficiency demonstrate results, broadly similar to the native speakers’ patterns, but less numerous and poorer in terms of variety of complex verb forms (Passive voice and Past perfect).

A One-way ANOVA was conducted to compare the effect of the level of proficiency (the initial two proficiency groups of L2 learners) in English as an independent variable, on the appropriate use of verbs from different aspectual classes, as a dependent variable. Table 2 below shows the results.

The analysis of variance showed that the effect of Level of proficiency in English on the number of verbs used, was significant for each aspectual class.

Accomplishments: $F(2,43) = 86.45$, $p = .000$

Achievements: $F(2,43) = 75.847$, $p = .000$

Statives: $F(2,43) = 37.638$, $p = .000$

Activities: $F(2,43) = 19.412$, $p = .000$

Table 2. *One-way ANOVA of the results*
ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Accomplishments	Between Groups	510.322	2	255.161	86.450	.000
	Within Groups	126.917	43	2.952		
	Total	637.239	45			
Achievements	Between Groups	372.768	2	186.384	75.847	.000
	Within Groups	105.667	43	2.457		
	Total	478.435	45			
Activities	Between Groups	77.412	2	38.706	19.412	.000
	Within Groups	85.740	43	1.994		
	Total	163.152	45			
Statives	Between Groups	72.942	2	36.471	37.638	.000
	Within Groups	41.667	43	.969		
	Total	114.609	45			

To track the distribution of past verb morphology in more detail, participants were divided into seven sub-groups, according to their accurate use of past verb predicates in the grammatical proficiency task. This was also done to avoid the considerable range of appropriate use within the same proficiency group.

Table 3 below presents the distribution of verbal morphology within the lexical aspectual classes found in the written narratives.

Table 3. Distribution of Tense-Aspect Morphology within Aspectual Categories in Written Narratives by Bulgarian L2 Learners

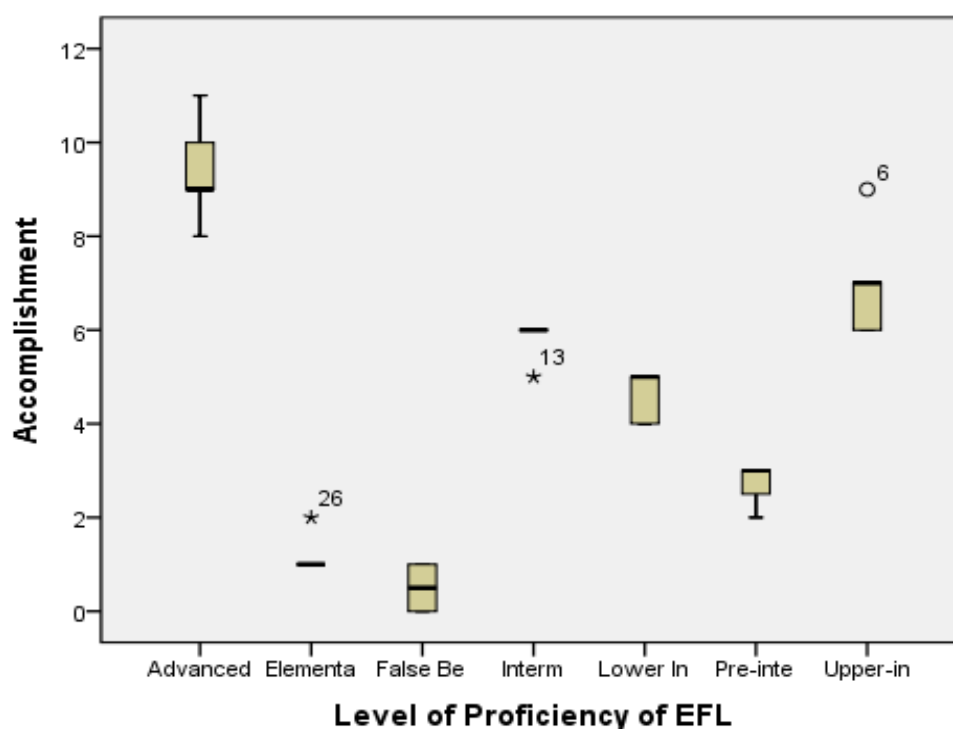
Distribution of Tense-Aspect Morphology within Aspectual Categories in Written Narratives by Bulgarian L2 Learners of English in Seven Groups													
GROUP	FORM	ACHIEVEMENTS		ACCOMPLISHMENTS		ACTIVITIES		STATIVES					
		%	number	%	number	%	number	%	number				
Group 1 80 to 90 N=5	Past	26.2	31	39.5	47	5.9	7	9.2	11				
	Past Progressive	0	0	0	0	10.1	12	0	0				
	Past Perfective	0.8	1	0.8	1	0	0	0.8	1				
	Present forms	0	0	0	0	0	0	0	0				
	Infinitive	0	0	0	0	0	0	0	0				
	Other	6.7	8	0	0	0	0	0	0				
	TOTAL 119 - 100%	33.7%	40	40.3%	48	16%	19	10%	12				
Group 2 70 to 80 N=5	Past	28.4	29	34.3	35	9.8	10	9.8	10				
	Past Progressive	1	1	0	0	12.8	13	0	0				
	Past Perfective	0	0	1	1	0	0	0	0				
	Present forms	0	0	0	0	0	0	0	0				
	Infinitive	1	1	0	0	0	0	1	1				
	Other	0	0	0	0	1	1	0	0				
	TOTAL 102 - 100%	30.4%	31	35.3%	36	23.6%	24	10.8%	11				
Group 3 60 to 70 N=5	Past	26.3	21	36.3	29	11.3	9	3.8	3				
	Past Progressive	0	0	0	0	16.3	13	0	0				
	Past Perfective	1.3	1	1.3	1	0	0	1.3	1				
	Present forms	0	0	0	0	0	0	0	0				
	Infinitive	0	0	0	0	0	0	0	0				
	Other	0	0	0	0	0	0	2.5	2				
	TOTAL 80 - 100%	27.5%	22	37.5%	30	27.5%	22	7.5%	6				
Group 4 50 to 60 N= 6	Past	17	16	21.3	20	11.7	11	3.2	3				
	Past Progressive	5.3	5	4.3	4	10.6	10	1.1	1				
	Past Perfective	0	0	1.1	1	0	0	0	0				
	Present forms	2.1	2	7.4	7	4.3	4	2.1	2				
	Infinitive	2.1	2	0	0	1.1	1	1.1	1				
	Other	2.1	2	0	0	1.1	1	1.1	1				
	TOTAL 94 - 100%	28.7%	27	34.1%	32	28.8%	27	8.6%	8				
Group 5 40 to 50 N=4	Past	20.7	12	19	11	8.6	5	6.9	4				
	Past Progressive	0	0	0	0	6.9	4	0	0				
	Past Perfective	0	0	1.7	1	0	0	0	0				
	Present forms	5.2	3	6.9	4	3.4	2	13.8	8				
	Infinitive	0	0	0	0	1.7	1	3.4	2				
	Other	0	0	0	0	0	0	1.7	1				
	TOTAL 58 - 100%	25.9%	15	27.6%	16	20.7%	12	25.9%	15				
Group 6 30 to 40 N=5	Past	10.8	8	12.2	9	5.4	4	4.1	3				
	Past Progressive	0	0	0	0	2.7	2	0	0				
	Past Perfective	0	0	0	0	0	0	0	0				
	Present forms	9.5	7	5.4	4	13.6	10	17.6	13				
	Infinitive	2.7	2	1.4	1	0	0	0	0				
	Other	0	0	0	0	5.4	4	9.5	7				
	TOTAL 74 - 100%	23%	17	19%	14	27%	20	31%	23				
Group 7 20 to 30 N=4	Past	10.9	5	6.5	3	4.3	2	0	0				
	Past Progressive	0	0	0	0	0	0	0	0				
	Past Perfective	0	0	0	0	0	0	0	0				
	Present forms	0	0	2.2	1	13	6	4.3	2				
	Infinitive	2.2	1	0	0	4.3	2	2.2	1				
	Other	8.7	4	6.5	3	26.1	12	8.7	4				
	TOTAL 46 - 100%	21.8%	10	15.2%	7	48%	22	15.2%	7				

As it can be seen from the table, learners with lower level of proficiency of English (Group 6 and 7) have used twice fewer tokens of past morphology and no Past Progressive or Past Perfective forms in any of the semantic classes, which could be viewed as evidence for the fact that they did not have a fully developed system of English past morphology in their interlanguage, in terms of expressing temporality. Although they made use of certain past morphology, they still lacked the acquisition of more complex past forms. The fact that they

have used four times more present or 'other' forms, compared with the more advanced participants, also supports the claim that they demonstrate belonging to the Lexical stage of expressing temporality. This is also proved by the extensive use of locative adverbials and connectives – 'then', 'and then', 'after that' and phase verbs, such as 'start', 'begin', 'finish', and 'continue'.

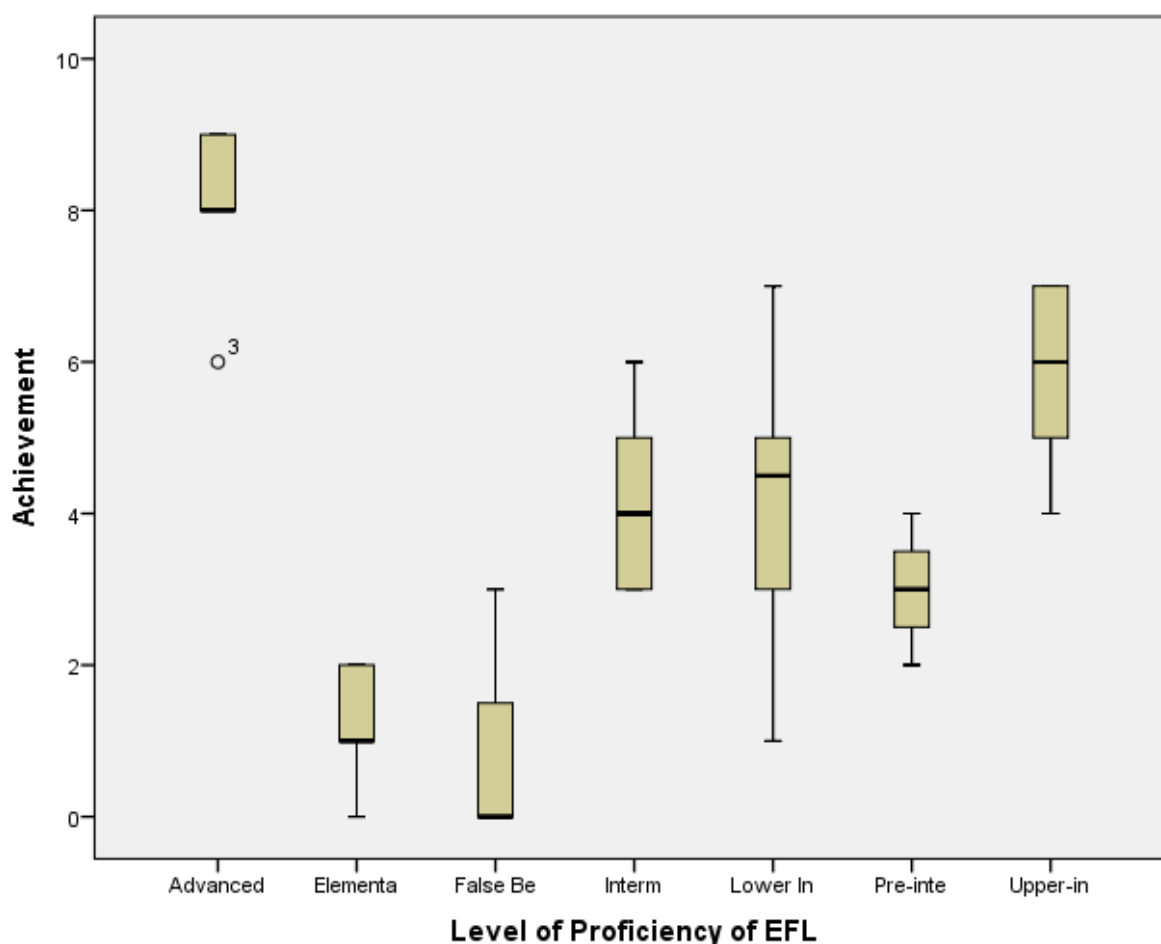
To confirm this claim, stem and leaf plot of frequency has been calculated for each aspectual class and morphological markings, for the different levels of proficiency. In Figure 1 and 2 below, the graphs for the most common semantic classes of verbs: accomplishments and achievements have been included, showing how learners with different levels of proficiency produced them in their written samples. For comparison, Figure 3 has also been included, a graph with 'present tenses', which might well be interpreted as 'no tenses' as English verbs are not inflected for Present Simple Tense, apart from the verb forms for 3rd Person, Singular. Such tokens (apart from 3rd Person, Sg ones) might be interpreted as verbs not being inflected for any tense.

Figure 1. *Stem and leaf plot frequency for the aspectual class of accomplishments according to the learners' level of proficiency in English*



As the figures clearly demonstrate, participants with the lowest proficiency in EFL – false beginners and those of elementary level have used far fewer (four or five times fewer) verbs for the aspectual classes of achievements and accomplishments (the first to be acquired according to the AH), compared to the advanced learners.

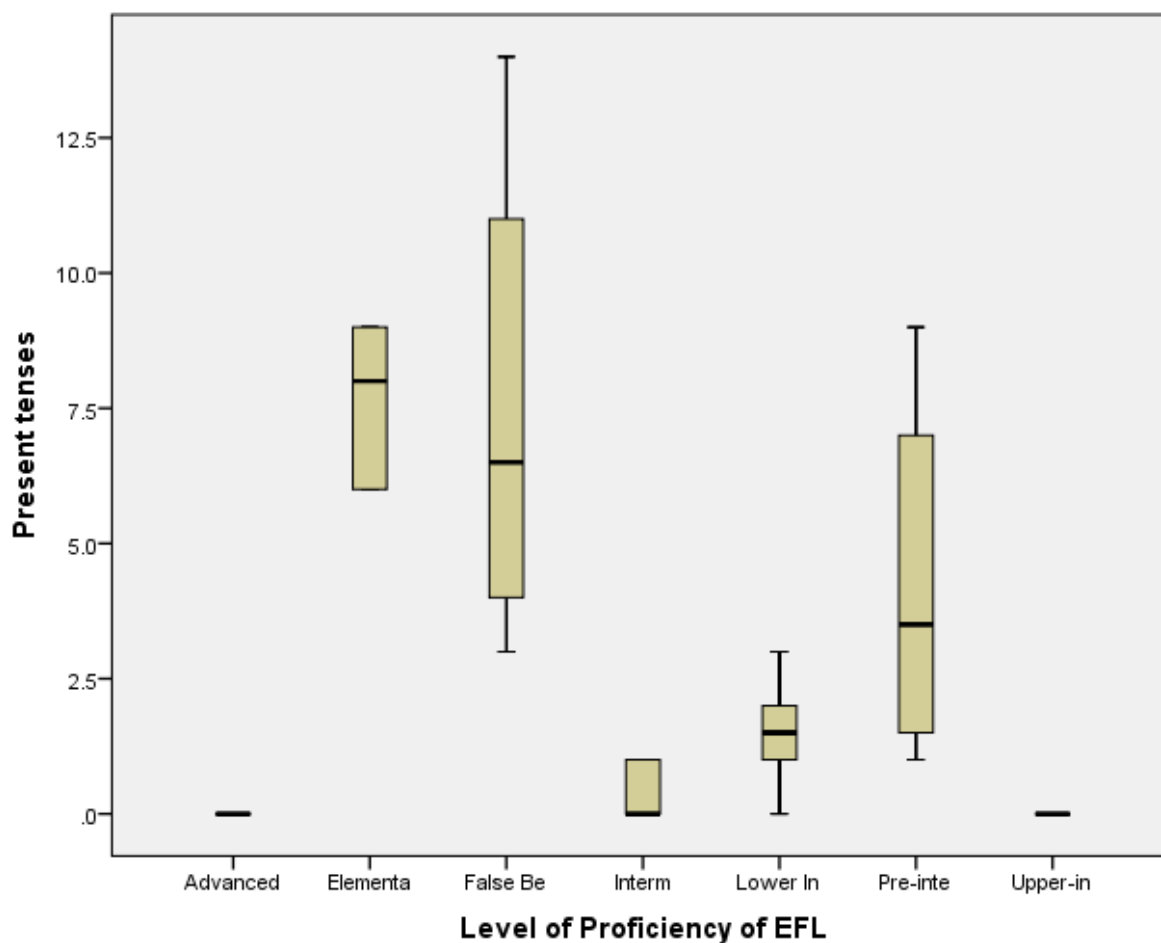
Figure 2. *Stem and leaf plot frequency for the aspectual class of achievements according to the learners' level of proficiency in English*



When it comes to the use of 'present forms' (or rather 'uninflected forms'), the situation is the exact opposite. Figure 3 below shows that participants with lower proficiency in EFL use such forms ten times more, compared to the advanced learners, who hardly use any.

Learners with lower level of proficiency of English mainly used "other" forms, namely – verbs not marked for any tense but accompanied by temporal and locative adverbials (e.g. now, then, here, there); connectives (e.g. and; and then); verb lexis (e.g. start, finish) to express temporality, which fits the description of the Lexical stage in expressing temporality, given by the pragmatists and the project funded by the European Science Foundation (1982 – 1988).

Figure 3. *Stem and leaf plot frequency for the use of present tense-aspect morphology according to the learners' level of proficiency in English*



It can also be interpreted as evidence for the existence of the Nominal utterance organization (NUO) or the “preverbal utterance organization”, which is very simple, constructed of seemingly unconnected nouns, adverbs and particles. Verbs are missing; hence there are no argument structures or case role assignments.

On the other hand, when compared, the results of the group with the highest level of proficiency in English, and those of the control group of native speakers, seem not very different. (See Table 2 below). This presents a different picture, which brings support for the claims of the AH.

Table 4. Use of tense-aspect morphology by the L2 group with the highest proficiency in EFL and by the control group

and by the control group

Group 1	Past	26.2	31	39.5	47	5.9	7	9.2	11	80.1	96
80 to 90	Past Progressive	0	0	0	0	10.1	12	0	0	10.1	12
N=5	Past Perfective	0.8	1	0.8	1	0	0	0.8	1	2.4	3
	Present forms	0	0	0	0	0	0	0	0	0	0
	Infinitive	0	0	0	0	0	0	0	0	0	0
	Other	6.7	8	0	0	0	0	0	0	6.6	8
	TOTAL 119 - 100%	33.7%	40	40.3%	48	16%	19	10%	12	100%	119

Control	Past	30.1	91	23.2	70	3.6	11	2.6	8	59.5%	180
Group	Past Progressive	0	0	0	0	10.6	32	0	0	10.5%	32
(Native	Past Perfective	2.3	7	1.7	5	0	0	0	0	4%	12
Speakers)	Present forms	0	0	0	0	0	0	0	0	0	0
N=5	Infinitive	5	15	1	3	2	6	0	0	8%	24
	Other	13.2	40	0.3	1	3	9	1.3	4	18%	54
	TOTAL 302 - 100%	50.7%	153	26.2%	79	19.2%	58	4%	12	100%	302

As it could be seen, apart from the usage of verbs, representing the aspectual classes of achievements and accomplishments, which seems to be much more thorough and systematic with the control group, and less so with the advanced L2 learners, the rest of the aspectual classes have been represented similarly in the two groups.

Conclusions

All in all, the presented results of the study show that, although in principle, the production of past tense-aspect morphology by Bulgarian L2 instructed learners of English follows the pattern claimed by the Aspect Hypothesis, especially so for the learners with advanced and upper-intermediate levels of proficiency in EFL: the perfective past forms are being first used with telic events (achievements and accomplishments) and are later spreading to atelic events and states, the production of learners with lower levels of proficiency has demonstrated a serious deviation from the pattern.

The latter have used almost five times fewer verbs, marked for the aspectual classes of achievement and accomplishment, which are claimed by the AH to be the first to enter the system of L2 learners' interlanguage. The results in Table 1 clearly show that the learners with lower level of proficiency have not yet reached the stage, at which to be at ease with expressing temporality by means of aspectual classes. Their usage of statives or complex verb forms, such as Past Perfect or Passive Voice is almost nil, which also shows lack of a developed tense-aspect system in their interlanguage. Instead, they have used "other present tenses", which include verb forms not inflected for any tense, five times more than the control group.

Table 3 also shows that learners with lower level of proficiency of English (Group 6 and 7) have used twice fewer tokens of past morphology and no Past Progressive or Past Perfective forms in any of the semantic classes, which could be viewed as evidence for the

fact that they did not have a fully developed system of English past morphology in their interlanguage, in terms of expressing temporality. Although they made use of certain past morphology, they still lacked the acquisition of more complex past forms. These learners mainly used verbs not marked for any tense but accompanied by temporal and locative adverbials (e.g. now, then, here, there); connectives (e.g. and; and then); verb lexis (e.g. start, finish, continue) to express temporality, which fits the description of the Lexical stage in expressing temporality, given by the pragmatists and the project funded by the European Science Foundation (1982 – 1988). Their past morphology production can also be interpreted as evidence for the existence of the Nominal utterance organization (NUO) or the “preverbal utterance organization”, which is claimed to be very simple, constructed of seemingly unconnected nouns, adverbs and particles. Inflected verbs are missing; hence there are no argument structures or case role assignments. It could be concluded that learners have not reached the Morphological stage of expressing temporality yet.

These findings confirm that the Bulgarian L2 learners with lower level of proficiency in EFL, represent the lexical stage of SLA, since a great number of the verbs in their narratives occur in morphologically unmarked forms - ‘base’ or ‘default’ forms, as reported by earlier studies (Meisel, 1980, 1987; Bardovi-Harlig, 1995a; Bardovi-Harlig & Reynolds, 1995; Andersen, 1991; Bergstrom, 1995; Ramat & Banfi, 1990). Their narratives show some evidence for what Klein (1993, 1994a) claimed about the early lexical stage - the lack of verbal morphology to support the learners’ narrative and their using connectives (‘and’, ‘and then’) and temporal adverbials instead.

One of the possible explanations for this, might be the difficulty learners experience in comprehending verbal morphology, as claimed by Brindley (1987) and J. Lee (1998, 1999). As some processing studies have claimed, learners process for meaning before form, thus, they process content words first; and they prefer to process lexical items over grammatical items for semantic information (Van Patten, 1996), often using adverbials, and not verb forms, to construct the past reference (J. Lee, 1999).

In conclusion, although not intended, the research brought in some more evidence that learners with lower levels of proficiency in English do not necessarily follow the predictions of the AH as there is no finite verbal system in place at this stage of the development of learners’ interlanguage. Transition from NUO to IUO and then to FUO is a very slow and gradual process and the coexistence of several types of utterance is not uncommon, as claimed by the European Science Foundation team (Dietrich et al, 1995).

However, the author of the article feels that further research, including participants with a variety of L1, and particularly ones with lower proficiency in English should be conducted, to reveal the influence of all pragmatic and non-pragmatic factors in the process of the second language acquisition of tense and aspect. The current research worked with a small sample and, although what has been claimed so far, might be true about this particular group of learners, research on a larger scale could lead to justified quantification of the results and important conclusions could be drawn about the general process of tense-aspect acquisition at the initial stages of the process, when L2 learners of English do not have a developed system of verb morphology to express temporality, and instead, rely heavily on lexical cues to do so.

Biodata

Mariana Gotseva is a PhD student at Birkbeck, University of London, where she received an SSPHS research scholarship. For the past 15 years, she has lived in the UK and worked as a tutor in EAP for the University of London, Manchester University, the University of Roehampton and Brunel University. Currently she works as an Assistant-professor of English Language at the South West University, Bulgaria. Her research interests include SLA, means of expressing temporality in English as L2, and English for academic purposes.

REFERENCES

- Andersen, R.W. (1984). The one to one principle of interlanguage construction. *Language Learning*, 34, pp. 77 – 95.
- Andersen, R.W. (1991). Developmental sequences: The emergence of aspect marking in second language acquisition. In T. Huebner and C.A. Ferguson (Eds.), *Crosscurrents in second language acquisition and linguistic theories*, pp. 305-24. Amsterdam: Benjamins.
- Andersen, R.W. & Shirai, Y. (1994). Discourse motivations for some cognitive acquisition principles. *Studies in Second Language Acquisition*, 16, pp. 133-56.
- Andersen, R.W. & Shirai, Y. (1996). The primacy of aspect in first and second language acquisition: The pidgin-creole connection. In W. C. Ritchie and T. K. Bhatia (Eds.), *Handbook of second language acquisition*, pp. 527-70. San Diego, CA: Academic Press.

- Ayoun, D. & Salaberry, M.R. (2008). Acquisition of English tense-aspect morphology by advanced French learners. *Language Learning*, 58:3, pp. 555-95.
- Bardovi-Harlig, K. (1992a). The relationship of form and meaning: A cross-sectional study of tense and aspect in the interlanguage of learners of English as a second language. *Applied Psycholinguistics*, 13, pp. 253-78.
- Bardovi-Harlig, K. (1992b). The telling of a tale: Discourse structure and tense use in learners' narratives. In L. F. Bouton & Y. Kachru (Eds.) *Pragmatics and language learning*. Vol. 3, pp. 144-61. University of Illinois, Urbana – Champaign: Division of English as an International Language.
- Bardovi-Harlig, K. (1992c). The use of adverbials and natural order in the development of temporal expression. *IRAL*, 30, pp. 299-320.
- Bardovi-Harlig, K. (1998). Narrative structure and lexical aspect: Conspiring factors in second language acquisition of tense-aspect morphology. *Studies in Second Language Acquisition*, 20, pp. 471 – 508.
- Bardovi-Harlig, K. (2000). *Tense and aspect in second language acquisition: Form, meaning and use*. Oxford: Blackwell Publishers Ltd.
- Bardovi-Harlig, K. & Bergström, A. (1996). The acquisition of tense and aspect in SLA and FLL: A study of learner narratives in English (SL) and French (FL). *Canadian Modern Language Review*, 52, pp. 308–30.
- Bayley, R.J. (1994). Interlanguage variation and the quantitative paradigm: Past tense marking in Chinese-English. In S. Gass, A. Cohen & E. Tarone (Eds.) *Research methodology in second language acquisition*, pp. 157–181. Hillsdale, NJ: Erlbaum.
- Bergstrom, A. (1995). *The expression of past temporal reference by English – speaking learners of French*. Unpublished doctoral dissertation, Pennsylvania State University, State College, PA.
- Berretta, M. (1995). Morphological markedness in L2 acquisition. In R. Simone (Ed.) *Iconicity in language*, pp. 197 – 233. Amsterdam: Benjamins.
- Chomsky, N. (1995). *The minimalist program*. Cambridge, MA: MIT Press.
- Chomsky, N. (1998). *Minimalist inquiries: the framework*. Cambridge, MA: MIT Press.
- Dietrich, R. (1995). The acquisition of German. In R. Dietrich, W. Klein and C. Noyau (Eds.), *The acquisition of temporality in a second language*, pp. 71 – 115. Amsterdam: Benjamins.
- Dietrich, R., Klein, W., & Noyau, C., (Eds.), (1995) *The acquisition of temporality in a second language*. Amsterdam: Benjamins.

- Dowty, D. R. (1979). *Word Meaning and Montague Grammar. The Semantics of Verbs and Times in Generative Semantics and in Montague's PTQ*. Dordrecht: Reidel.
- Giacalone, R. A. (2002) How do learners acquire the classical three categories of temporality? Evidence from L2 Italian. In R. Salaberry and T. Shirai (Eds.) *Tense-aspect morphology in L2 acquisition*. (pp. 221 – 248). Amsterdam: Benjamins.
- Givon, T. (1979). *On understanding grammar*. New York: Academic Press.
- Givon, T. (1985). Markedness as meta-iconicity: distributional and cognitive correlates of syntactic structure. In: *Functionalism and grammar*, pp. 25-69. Amsterdam: Benjamins.
- Klein, W. (1986). Language Acquisition at different ages. In D. Magnusson (Ed.) *Individual Development over the Lifespan: Biological and Psychosocial Perspectives*, (pp. 88 – 108). Cambridge: Cambridge University Press.
- Klein, W. & Perdue, C. (Eds.) (1992). *Utterance structure: developing grammars again*. Amsterdam: Benjamins.
- Klein, W., & Perdue, C. (1997). The Basic Variety (or: Couldn't natural languages be much simpler?). *Second Language Research* 13, pp. 301-347.
- Meisel, J.M. (1987) Reference to past events and actions in the development of natural language acquisition. In C. W. Pfaff (Ed.), *First and second language acquisition processes* (pp. 206 – 224). Cambridge, MA: Newbury House.
- Perdue, C., (Ed.), (1993): *Adult Second Language Acquisition*. Cambridge: Cambridge University Press.
- Robison, R.E. (1990). The primacy of aspect: Aspectual marking in English interlanguage. *Studies in Second Language Acquisition*, 12, pp. 315–30.
- Robison, R.E. (1995). The aspect hypothesis revisited: A cross-sectional study of tense and aspect marking in interlanguage. *Applied Linguistics*, 16, pp. 344–70.
- Salaberry, R. (1998) The development of aspectual distinctions in academic L2 French. *Canadian Modern Language Review*, 54, pp.508 – 542.
- Salaberry, R. & Shirai, Y., (Eds.), (2002). *The L2 acquisition of tense-aspect morphology*. Amsterdam: Benjamins.
- Schumann, J. (1987) The expression of temporality in basilectal speech. *Studies in Second Language Acquisition*, 9, pp. 21-41.
- Shirai, Y. & Andersen, R.W. (1995). The acquisition of tense-aspect morphology: A prototype account. *Language*, Vol. 71, No 4, pp. 743-62.
- Slabakova, R. (2003). Semantic evidence for functional categories in interlanguage grammars. *Second Language Research*, 19:1, pp. 42-75.

- Slabakova, R. & Montrul, S. (2002). On viewpoint aspect interpretation: A UG perspective. In Y. Shirai and R. Salaberry (Eds.), *Tense – aspect morphology in L2 acquisition*, pp. 363 – 98. Amsterdam: Benjamins.
- Sugaya, N. and Shirai, N. (2007). The acquisition of progressive and resultative meanings of the imperfective aspect marker by L2 learners of Japanese: transfer, universals or multiple factors? *Studies in Second Language Acquisition*, 29 (1), pp. 1-38. Cambridge: CUP.
- Van Valin, R., (Ed.), (1992). *Advances in role and reference grammar*. Amsterdam: Benjamins.
- Vendler, Z. (1957). Verbs and times. *The Philosophical Review*, Vol. 66: 2. pp. 143 – 160.
- Vendler, Z. (1967). Verbs and times. In Z. Vendler (Ed.) *Linguistics and philosophy*, pp. 97 – 121. Ithaca, NY: Cornell University Press. (Reprinted from *The Philosophical Review*, 1957, 66, pp. 143 – 160).
- Von Stutterheim, C. & Klein, W. (1987). A concept-oriented approach to second language studies. In C. W. Pfaff (ed.) *First and second language acquisition processes* (pp.191 – 205). Cambridge: Newbury House.